

The Dow Chemical Company - Polyethylene Resin

Wednesday, December 8, 2021

General Information

Product Description

DOWLEXTM 2517 Polyethylene Resin is a narrow molecular weight distribution copolymer designed to offer good ESCR and low temperature properties with excellent flexibility. This resin has good processability over a wide range of molding conditions.

- · Linear Low Density Polyethylene
- For lids, housewares and containers
- · Excellent low temperature flexibility, good ESCR

Complies with:

- U.S. FDA FCN 424
- Canadian HPFB No Objection (With Limitations)
- EU, No 10/2011
- U.S. FDA-DMF
- U.S. USP 23
 - · Consult the regulations for complete details.

General		
Material Status	Commercial: Active	
Regional Availability	Asia Pacific	North America
Additive	Antiblock: No	Processing Aid: No Slip: No
Agency Ratings	DMFEU No 10/2011	 FDA FCN 424 HPFB (Canada) No Objection ¹ USP 23
Forms	 Pellets 	
Processing Method	 Injection Molding 	

ASTM & ISO Properties ²									
Physical	Typical Value	(English)	Typical Value	(SI)	Test Method				
Density / Specific Gravity	0.919		0.919		ASTM D792				
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	25	g/10 min	25	g/10 min	ASTM D1238				
Environmental Stress-Cracking Resistance (ESCR)					ASTM D1693				
122°F (50°C), 100% Igepal, F50	4.00	hr	4.00	hr					
Mechanical	Typical Value	(English)	Typical Value	(SI)	Test Method				
Tensile Strength					ASTM D638				
Yield	1400	psi	9.65	MPa					
Break	1300	psi	8.96	MPa					
Tensile Elongation					ASTM D638				
Yield	3.0	%	3.0	%					
Break	600	%	600	%					
Flexural Modulus - 2% Secant	34000	psi	234	MPa	ASTM D790B				
Impact	Typical Value	(English)	Typical Value	(SI)	Test Method				
Tensile Impact Strength ³	190	ft·lb/in²	399	kJ/m²	ASTM D1822				
Hardness	Typical Value	(English)	Typical Value	(SI)	Test Method				
Durometer Hardness (Shore D)	45		45		ASTM D2240				

Copyright ©, 2021 Avient Distribution Company The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variation in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the application disclosed. Full-scale testing and end product performance are the responsibility of the user. Avient Distribution Company shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond Avient Distribution Company's direct control. Avient Distribution Company MAKES NO WARRANTIES, EXPRESS OR IMPLIED, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendations, nor as an inducement to practice any patented invention without permission of the patent owner.

DOWLEX™ 2517

The Dow Chemical Company - Polyethylene Resin

Thermal	Typical Value	(English)	Typical Value	(SI)	Test Method
Deflection Temperature Under Load					ASTM D648
66 psi (0.45 MPa), Unannealed	103	°F	39.4	°C	
Brittleness Temperature	< -105	°F	< -76.1	°C	ASTM D746
Vicat Softening Temperature	197	°F	91.7	°C	ASTM D1525
Melting Temperature (DSC)	255	°F	124	°C	Internal Method
Peak Crystallization Temperature (DSC)	218	°F	103	°C	Internal Method

Plaque molded and tested in accordance with ASTM D4976.

Notes

¹ With limitations

Copyright ©, 2021 Avient Distribution Company The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variation in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the application disclosed. Full-scale testing and end product performance are the responsibility of the user. Avient Distribution Company shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond Avient Distribution Company MAKES NO WARRANTIES, EXPRESS OR IMPLIED, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendations, nor as an inducement to practice any patented invention without permission of the patent owner.

² Typical properties: these are not to be construed as specifications.

³ Type S